G. R. S. 59] GPB—15,000 20-12-13

GENERAL AND REVENUE SECRETARIAT.

1913-14
(Sanitary.)

File No. 6-13

Serial Nos. 40 & 43

Papers Filed.

Month May 1914.

SUBJECT.

Report on the All India Sanitary conference at Lucknow.

PREVIOUS REFERENCES.	LATER REFERENCES.

E Subramaniam
13-5-14.

4961

G.R.S. 11] 1913-14

GENERAL AND REVENUE SECRETARIAT.

(Sanitary)

NOTES.

File No. 6-13

FILE HEADING.

Report on the All-India Sanitary Conference at Lucknow

From

The Sanitary Commissioner

No. 3663 Dated 6. 3. 14 Received 7. 3. 14

Diary No. 4961	Enclos. /	Spare Copies.	Serial No. 40

BRIEF ABSTRACT OF LETTER.

Forwards for information a report on the All-India Sanitary Conference at Lucknow received from Dr. M. Srinivasa Rao, Director of the Public Health Institute & Deputy Sanitary Commr. who attended the Conference.

NOTES AND ORDERS.

The subjects that are treated in the report are the following:- Malaria plague, cholera, Infantile Mortality, vital statistics and general sanitation.

Malaria As regards the measures to be carried out in combating malaria, Dr Srinivasa Rao

NOTES—First Sheet.

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Serial No.

invites attention to his report on the All-India Sanitary Conference during 1912. He also commends some of the suggestions made at the ~~present~~ last Conference on the subject

Plague. The importance of vigorous anti-plague measures during the off-seasons is again urged. The use of Hydrocyanic acid gas is suggested as one of the new methods for the destruction of rats and rat fleas.

Infantile mortality. To prevent the excessive infantile mortality it is suggested that trained nurses should be employed for teaching mothers in the matter of personal hygiene and feeding of infants. The improvement of milk supply is also recommended.

Vital Statistics. In order to render the registration of vital statistics more effective it is suggested that Inferior officers of and above the grade of Sub-Assistant Surgeons should be employed as Registering officers

Rural Sanitation. The following are the suggestions made on the subject of progress of sanitation in rural areas.

(a) Supply of pure drinking water

(b) provision of Travelling dispensaries

(c) Teaching of Elementary Hygiene in schools

(d) The Constitution of village Sanitary Committees

NOTE—Contn. sheet.

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(e) The establishment of Health officers for rural areas

(f) Construction of model villages laid out on sanitary principles in a few selected localities

(g) Extension of village sites in congested parts of the districts.

Submitted for perusal

16.3.13

2. The San[y] Com[r] has not offered any remarks or suggestions for practical action in forwarding the report.

3. The Malaria survey ~~work~~ referred to in the report will have to be undertaken in connection with the scheme for the improvement of the malarial. A report as to the organisation of such a Survey is due from the San[y] Com[r], as per para 12 of the Malarial Improvement Scheme order of the 24th February.

4. The suggestions as regards plague prevention are two-fold

(i) ~~Urgent~~ Adoption of vigorous anti-plague measures during the off-season i.e. Concentration of preventive measures in the few infected villages during the off-season.

The principle underlying this Suggestion

NOTE Contn. sheet.

C P B.—60,000—7-11-13

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is simple. The Sanit Comr may be requested to issue needful instructions in pursuance of this suggestion and report the result at the end of 2 years

(ii) The use of Hydrocyanic acid gas for the destruction of rats may probably ~~also~~ merely a costly novelty. No ~~for~~ orders appear necessary as regards this, at present.

5 The next point worthy of note is the employment of Nurse district visitors in Madras & Bombay to instruct mothers in home and personal hygiene, and in the Care & feeding of Children. A similar system has been in force in Glasgow for a long time and is reported to have succeeded in a remarkable degree. This however, is a measure purely for Cities, and the right kind of nurses ~~is~~ not easy to get. Further the scheme is a costly one ~~as~~ in Madras the nurses are paid Rs 200/- per mensem & Conveyance allowance

(Vide Bellis Glasgow & Madras pp. 197-98)

6 Dr. Srinivasa Rao has read a paper on Milk and Milk products, but no ~~practical~~ practical action resolutions were adopted in this and the three papers ~~read~~ on milk & milk supply that were received in the Conference. ~~In doing~~

7 The suggestion that Sub assistant surgeons should be employed as Registering officers for the record of births & deaths is a very Costly one and impracticable ~~in~~ in rural areas, if not-

NOTE.—Contn. sheet.

General and Revenue Secretariat.

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in ~~for~~ cities also. Further it is not clear how Sub Asst. Surgeons will be in a better position to trace out defaulters, and therefore provide against omission of registry, than any other Class of public Servants.

8 As regards ~~the~~ the suggestions about meat Sanitation, the provision of travelling dispensaries, and the Construction of model Sanitary villages will be undertaken in Connection with Rural improvement ~~Act~~.

9 The D. G. of Education may be requested to take needful action to secure the teaching of elementary hygiene in the Schools.

10 The Senior Surgeon, also, may be requested to arrange for the imparting of instruction in Elementary hygiene & the principles of Sanitation to ~~to~~ midwives during their training ~~to that to be made~~ These will in a small way, serve the function of Rural District visitors for the present

11 The other portions of the report do not appear to call for immediate practical action.

Submitted for orders

Sec'y)

20/3

12 The ~~Senior Surgeon~~ Sanitary Commissioner's letter may be recorded with the observation that he may take such action as he may consider desirable & practicable

NOTE.—Contn. sheet.

611—G.100—17-6-12.

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R. S. 12]

General and Revenue Secretariat.

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in respect of the various suggestions [illegible] in Dr Srinivasa Rao's report.

22
9/4

Hm
9/4

2nd member.

13 I agree generally
Secy
12/4

2
10/4

Draft
Hm
13/4

14 Draft submitted.

57
14.4.14

Hm
16/4

2nd member)
15 Ofc approves by 2d Mr

Hm

2
17/4

16 This may probably be submitted to the Dewan before issue of Circular
Report received last year was submitted to him

Hm
22/4

Sec
At this stage it does not seem necessary. When proposals are received from the S.S / SC, they will go up to the Dewan

Dewan
24/4

Hm
24/4

NOTE.—Contn. sheet.

611—C,000—17-6-12.

G. R. S. 12]

General and Revenue Secretariat.

Sec-File No. 6 of 1913-14

Serial No.	
43	To the Secretary Commission, No. 10996 dt 4.5.14 Records with certain observations the Communication referred to in serial No. 40

NOTE.—Contn. sheet.

G.P.B.—60,000—7-11-13

W
7/3 Pr

191

From

The Sanitary Commissioner
in Mysore, Bangalore.

To

The Secretary to Government
Gen. & Rev. Departments,
Bangalore.

Dated 6 - MAR 1914

Despatched

Received

General No. 3663
No.

Enclosure No. one

Submitting a report on the All-India Sanitary Conference held at Lucknow.

GPB--50,000--26-9-12

7.m6-13-Leo

1

Mp 3663
Europe

Office of the Sanitary Commissioner
with the Government of Mysore,

Bangalore dated the. 6th March 1914.

From

Rao Bahadur
T.V. Arumugam Mudaliar Esq.,
Sanitary Commissioner with the
Government of His Highness the
Maharaja of Mysore, Bangalore.

To

4961

K.R. Srinivasa Iyengar Esq., M.A.,
Secretary to the Government of His
Highness the Maharaja of Mysore,
General & Revenue Departments,
B a n g a l o r e .

Sir,

I have the honor to forward herewith for the information of Government a report on the All-India Sanitary Conference at Lucknow received from the Director of the Public Health Institute and Deputy Sanitary Commissioner, who attended the Conference

I have the honor to be,

Sir,

Your most obedient servant,

T.V. Arumugam

Sanitary Commissioner.

P.H.

2

No. 3652

Office of the Sanitary Commissioner
with the Government of Mysore,

Bangalore dated the 5th March 1914.

From

M. Srinivasa Rao Esq., M.A., M.D., D.P.H.,
Deputy Sanitary Commissioner in Mysore,
B a n g a l o r e

To

Rao Bahadur
T.V. Arumugam Mudaliar Esq.,
Sanitary Commissioner with the
Government of His Highness the
Maharaja of Mysore, Bangalore.

Sir,

I have the honor to forward for the information of the Government of Mysore, a report on the All-India Sanitary Conference held in Lucknow which I attended as a delegate from Mysore.

80 papers were read at the Conference and many of them were subjected to more or less discussion.

8 of these related to Malaria,

3 of these related to Kala Azar,

2 of these related to Cholera,

2 of these related to Plague,

4 of these related to Tuberculosis,

1 of these related to Relapsing fever,

2 of these related to Guinea-worm disease,

4 of these related to Italian system of reclamation of land by silt deposit, with reference to mitigation of malaria.

4 of these related to Infantile Mortality,

3 of these related to Rural Sanitation,

4 of these related to Town-planning & improvement,

4 of these related to Vital statistics,

2 of these related to medical inspection of schools and the teaching of Hygiene in schools.

3 of these related to Milk standards,

6 of these related to Milk trade,

3 of these related to Notification of diseases,

13 of these related to Conservancy and drainage, and

10 of these related to Improvement and Protection of Water supplies, Filters and Bacteriological Examination of water.

Only such points as are of interest and applicability to the Mysore Province are treated in this report.

Malaria - The papers read at the Conference have again established the value of carefully carried out malaria surveys which have in almost every case brought to light important and unexpected facts regarding the causation of malaria in particular localities. I have in my reports on the All-India Sanitary Conference in 1912 and in the special report on the measures adopted by the United States Government in the Panama Canal Zone against Malaria referred at great length to the various measures to be resorted to in combating malaria. As it is unnecessary to traverse the same ground over again, I would merely invite attention to those reports and confine myself here to matters that came before the Conference this year. Among the many subjects that are awaiting to be investigated, the following were suggested as additional ones that require to be considered in a comprehensive anti-malarial campaign:

(1) The effect of the proximity to the hills on an increase in the spleen rate.

(2) The effect of a combination of trees and grass in intensifying malaria by interfering with ventilation.

(3) The effects of stagnant water in borrow pits along the Railway lines in increasing the number of breeding places of mosquitoes.

(4) The seasonal prevalence of malarial parasites.

(5) The attraction of mosquitoes by artificial rays of light.

(6) The chemical treatment of tanks in order to prevent the growths of Algae and aquatic weeds without

without destroying fish.

(7) The Italian system of reclamation of low-lying lands by utilising the silt brought down by rivers, with reference to the mitigation of malaria.

(8) The conditions which render rice-cultivation dangerous in some places and harmless in others.

Plague - The importance of vigorous anti-plague measures during the off-season is again emphasised. All Plague epidemics are strictly limited to one Plague season. If therefore Plague infection be eliminated from the few villages which bridge the off-season, then there is the possibility of freeing a large area of Plague until it is reinfected from outside. From this it follows that preventive measures concentrated on the few infected villages during the off-season will be far more effective than diffused effort. Again the rat population of an infected village is reduced by Plague whilst the disease is prevalent, so when the off-season begins, the rat population is small and much more amenable to treatment. So a small reduction of rat population whilst conditions are unfavorable for the spread of Plague, would result in stamping out the epizootic among the rats. These researches open out a possibility of greater success in the anti-plague measures in the rural areas than the practice hitherto followed. For further details I would refer to my report on the proceedings of the 2nd Sanitary Conference. Rat destruction has fallen into disfavor at the present time but this is undeserved. The method of poisoning rats by a preparation of Phosphorus locally made ~~were~~ was reported to have had great success in Panjaub. A new method of destruction of rats and their fleas was described by the Director of Bombay Bacteriological Laboratory and his Assistants. This is done by the use of Hydrocyanic acid gas which is generated in a special apparatus as demonstrated at Lucknow.

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Guinea-worm disease - Though the filaria are known to pass through a portion of their cycle of existence in the body of cyclops, the method of their transmission to the human tissues is still a matter of controversy. But the infection by the Filaria is said to be easily prevented by simply straining the water containing the cyclops through a piece of cloth.

Cholera - Importance of Cholera carriers alluded to in my last report was again emphasised. Experiments were brought forward to show that the life of Cholera Vibrio outside the human host is short. Temperature has a powerful influence on the vitality of the vibrio, its life being shorter in the hot season and more prolonged in the cold. The Cholera vibrios discharged from carriers or actual cases in the low temperature months will be potentially more dangerous than those discharged in the high temperature months. In fighting Cholera, man should be protected against man and flies. The fly-nuisance is also connected with high Infantile mortality, dysentery, diarrhoea and enteric fever. All fly-breeding grounds e-g dirty stables, cowsheds, sweetmeat shops, butchers' shops, fruit and vegetable shops should be constantly inspected and all rubbish should be persistently cleared and burnt. Many private house-latrines breed flies and should receive the attention of Sanitary Officers By the use of incinerators distributed in different places, the cost of chemical disinfectants would be saved.

Tuberculosis - No new facts relating to the prevention of Tuberculosis were brought before the Conference and I have to refer to my former report for the preventive measures.

Excessive Infantile Mortality - It is due to (1) mothers' ignorance of personal hygiene during pregnancy and of infant hygiene, (2) employment of ignorant midwives during child-birth, (3) bringing up children on poor or skimmed or adulterated milk, (4) Small-pox and malaria and gastro-intestinal complaints, (5) over-crowding (6) the Meteorological phenomenon of abnormal high temperature. The Conference emphasised the necessity of educating mothers, providing a larger number of trained midwives, building

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building model sanitary tenements, preventing over-crowding and improvement of milk supply. The Conference also drew particular attention to the encouraging results which have attended the employment of nurse District Visitors in Bombay and Madras. The nurses were employed in Madras primarily for anti-malarial work. But they have been found to be extremely useful in instructing mothers in home and personal hygiene and in the care and feeding of infants. They instruct people in habits of cleanliness in and around the houses and in the streets. They have also brought about an improvement in the work of the Municipal subordinates. In their house to house inspection they trace out various diseases e-g small-pox, measles, tuberculosis etc etc. The success of the scheme depends upon obtaining the right kind of nurse. Impatience, want of tact, inexperience and ignorance of vernaculars would tend to alienate the sympathies of the people. The women employed must be strong, not young, have considerable experience of the habits and customs of Indians and possess a thorough knowledge of vernacular languages. Women with Medical qualifications would be preferable but they must be paid well. The nurses in Madras are paid Rs. 200 per month and conveyance allowance.

Intimately connected with the question of Infantile mortality is the improvement of milk supply. I stated in my paper on " milk and milk products " that in large cities and towns, buffaloes' milk adulterated with water is generally sold as cows' milk. In the absence of any standards, it is not possible to get dishonest milkmen convicted in Courts. The legal standards fixed in England are not applicable here as Buffaloes' milk contains a larger quantity of fats than cows' milk and is capable of being diluted with 2 to 3 times its volume of water without the quantity of fats falling below 3 per cent or the total solids excluding fats, below 8.5 per cent. I

7

I suggested that in the detection of adulteration, the percentage of Lactose furnishes a better guide than the percentage of fats or solids not fat. Similarly I proposed that the Reichert meissel figure should be used for the detection of adulterations in ghee. As nobody was ready with any similar suggestions, the Conference resolved that with reference to proposed legislation for the regulation of foods and drugs in India, it is necessary that chemical standards of purity for milk and milk products should be established, that as European standards were not applicable, further investigations to obtain suitable standards are desirable, that to prevent the adulteration of milk which is now practically universal in India, improvements in the production and distribution of milk are urgently necessary, but that in view of the present high price of milk and considering that any further rise in the price of milk would seriously affect poor consumers, it is essential that organisation should precede restriction and there should be mutual help and co-operation between sanitarians, milk-dealers and the Agricultural Department.

Medical Inspection of schools etc. - The Conference was of opinion that medical inspection of schools and scholars, special attention to the hygienic condition of the schools, the provision of playgrounds etc are eminently desirable from the point of view of Public Health.

Vital Statistics. - The registration of vital statistics being admittedly defective in all parts of India, it was suggested that Medical Officers of and above the grade of Sub Assistant Surgeons should be employed as Registering Officers. The registration is likely to be rendered more popular by the Registering Officers being compelled to give authenticated copies of entries made in the registers and by these copies being accepted as legal evidence of

of Births or Deaths in Law Courts.

Notification of diseases is recognised to be a useful measure in the prevention of epidemics. To be of any use it must be made compulsory but in the present state of the country, compulsory notification of diseases is impracticable.

Rural sanitation - As regards rural sanitation, the conference recommended that it is desirable to push forward such schemes as are practicable and that special attention should be devoted at present to (a) the extended provision of protected water supply in school compounds and at places of concourse e-g markets, fairs, thanas, Katcheris etc, (b) the provision of Travelling Dispensaries (c) the teaching of Elementary Hygiene in schools, (d) the instruction of midwives, (e) the constitution of Village Sanitary Committees (f) the appointment of Health Officers for rural areas, (g) the construction of model villages laid out on sanitary principles in a few selected localities and (h) the extension of village sites in congested Districts wherever necessary. As regards the subjects connected with Sanitary Engineering, the Conferenc passed the following resolutions.

All Municipalities which have not already done so should introduce satisfactory building, water and drainage bye-laws and make adequate arrangements for enforcing them and if any Municipality fail to take action, higher authority should be empowered to compel them to do so.

The preparation and execution of Town planning and housing schemes and the acquisition of land in process of development in the neighbourhood of growing towns are legitimate objects of Municipal expenditure.

Compensation for the acquisition of residential buildings which are declared by competent authority to be unfit for human habitation and the sites on which they

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they stand, should be limited to the value awarded without any addition on account of compulsory acquisition.

The progress of sanitation is greatly impeded on all sides by the want of Sanitary Engineers and the Establishment of Sanitary Engineers should be placed on an adequate basis to meet the demands for the design and execution of sanitary works.

The following should be added to the list of selected subjects for treatment.

(1) Latest types of sewage disposal works suitable for small and large communities in India.

(2) Prevention of dust on roads.

(3) Statistics of sedimentation and filtration of water.

(4) Prevention of waste in water supply.

(5) Method of sinking deep bores for water supplies or other purposes.

(6) Rate and ratio of run-off to rainfall from large and small catchment areas for the purposes of

(a) Water supply, and

(b) Sewerage.

I have the honor to be,
Sir,
Your most obedient servant,

M.A., M.D., D.P.H.,

Deputy Sanitary Commissioner.

P.H.

6-3-1914

G.R.S. 28]

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25/4

File No. 6-13

Diary No. of letter replied to 4961

Serial No. 43

Proceedings of the Government of His Highness the Maharaja of Mysore

GENERAL AND REVENUE SECRETARIAT.
(Sanitary)

the 191 .

READ—

Letter No. 3663 dated the 6th March 1914, from the Sanitary Commr forwarding a report on the All-India Sanitary Conference at Lucknow

Date of issue 4.5.14

Signed by M.A.V. Ramandham

~~ORDER THEREON. No.~~

received from Dr. M. Srinivasa Rau, Director of the Public Health Institute & Deputy Sanitary Commr, who attended the Conference.

over

SUBJECT.

GPB—50,000—1-12-12

Order Union, 1099/6 Sanitary 6-13 dy 4.5.14

Recorded with the observation

that the Sanitary Commr may take

such action as he may consider

desirable and practicable in

respect of the various suggestions

contained in Dr. Srinivasan's report

W.O. 1614

Ans 16/4 for Secretary

The Sanitary Commr